

**Document for the Q2018 Conference – session 36 "Special Session: Quality assurance of statistics underlying the Macroeconomic Imbalance Procedure (MIP)"**

**Ensuring quality of Macroeconomic Imbalance Procedure (MIP) indicators: a multi-level cooperative approach**

**1. Introduction**

The Macroeconomic Imbalances Procedure (MIP) was established under Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011. It was part of the 'Six-Pack' regulation on economic governance for the prevention and correction of macroeconomic imbalances in the EU[[1]](#footnote-2).

The MIP includes a scoreboard that consists of fourteen main indicators (and twenty eight auxiliary indicators) that are used for the early detection of existing or emerging macroeconomic imbalances at Member State level. This scoreboard is included in the annual Alert Mechanism Report released by the European Commission at the start of the European Semester.

The Alert Mechanism Report identifies the Member States for which in-depth analyses will be required, given the economic reading of their scoreboard indicators.

MIP scoreboard indicators are largely derived from economic and financial statistics produced by the European Statistical System (ESS) and the European System of Central Banks (ESCB), and which are then transmitted to Eurostat. The quality of these statistics is therefore of high importance to policymakers, and has been the object of close attention since the conception of the scoreboard. In particular, statistical work related to MIP is carried out in close cooperation with key users such as DG-ECFIN of the European Commission. This ensures that the quality assurance service provided by Eurostat and the ECB/Directorate General Statistics (ECB/DG-S) – as described below – is aligned to policy needs.

**2. The quality assurance mechanisms**

The ESS and the ESCB continuously apply statistical quality assurance mechanisms. This is to ensure that their statistics meet the quality standards required for policy use, are reliable and comparable across Member States, and are in line with international statistical standards. The ESS and the ESCB, as well as Eurostat and the ECB/DG-S must work closely together to ensure that reliable statistical data are available for the MIP. The need for such close collaboration has been reiterated by the ECOFIN Council since 2011.

MIP indicators are underpinned by statistics such as GDP and components, Balance of payment/International investment position data (BoP/IIP), unit labour costs, house price statistics, financial accounts, government finance statistics and labour market statistics. The majority of these statistics are regulated by legal provisions, which in most cases include specific quality assurance and monitoring procedures. The quality standards found in the ESS Code of Practice and the ESCB's Public Commitment specifically aim to guarantee the accuracy, reliability and comparability of the data to ensure that data quality is of the same high standard within the European Union. These standards are very similar to those instituted on a global basis by the UN, the IMF and the OECD.

Eurostat follows a quality management approach based on the Code of Practice, which covers all statistical domains and includes specific provisions by domain. For example, unit labour costs and government finance statistics fall within the quality monitoring framework for ESA 2010 data. Government finance statistics are also governed by specific legislation covering quality assurance in the field of Excessive Deficit Procedure statistics.

[The Quality Assurance Framework of the European Statistical System (ESS QAF)](http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646) identifies activities, methods and tools that can provide guidance and support when implementing the ESS Code of Practice and that can equally be used when developing, producing and disseminating European statistics. Similarly, the ECB Statistics Quality Framework (ECB SQF) sets forth the main quality principles and elements guiding the production of ECB statistics. It serves to ensure that ECB statistics remain fit for use by the ECB, its decision-making bodies and other ESCB users, as well as users outside the ESCB.

By striking the right balance between timeliness and detail, the ESS and the ESCB produce fit for purpose macroeconomic and financial statistics in a cost-effective manner. To strike this balance, statisticians, in close liaison with users and reporting agents and prior to developing new statistics or imposing additional reporting requirements, have to undertake a 'merits and costs evaluation' considering the trade-offs between the timeliness, accuracy, reliability, detail and cost of macroeconomic statistics.

The frequency of the statistical production, which is in most cases regulated, has also to be taken into account: high frequency statistics are generally compiled with less detail, not to overburden respondents, to ensure the appropriate timeliness, while more detailed statistics become available less frequently and with a longer time-lag. For example, to compile some monthly balance of payments data, surveys may be confined to reporting agents of a certain size. Moreover, the statistical compilation process combines information collected from reporting agents via statistical surveys, administrative data and necessary estimations with statistical techniques and expert judgment. In addition, the estimate of some variables may only be achieved through modelling, with a more significant role for expert judgment.

Arbitrage is also usual between the degree of reliability and accuracy on the one hand, and timeliness of publication on the other hand: the shorter the length of time for collecting and controlling the statistical output before publication, the less strong the accuracy and reliability of the statistics will be (all other things being equal).

Last but not least, the broad nature of some statistics, such as GDP, financial accounts or BoP/IIP statistic are such that reliability and accuracy are always to be taken in relative terms. In other others, while these statistics would provide for a sound overview of macroeconomic developments, the level of estimation and imputation is such that absolute analysis need to be carried out with precaution. This is even more for MIP scoreboard indicators that rely on “net” concepts (e.g. net IIP), which are the difference between two extremely large amounts (assets and liabilities).[[2]](#footnote-3)

**3. The 3 level quality framework for MIP**

To ensure full transparency with respect to the quality of the MIP-related statistics, a three-level quality reporting system was set up over the last few years with the support of the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB).

The first level aims at enhancing the communication on quality assurance of MIP statistics towards the Council and European Parliament, policy makers and the public at large with key messages on the reliability and comparability of such statistics. This level draws on the information gathered in the next two levels. It takes the form of a joint Eurostat/ECB summary report assessing the quality of all statistics underpinning the MIP which is published each year[[3]](#footnote-4) and forms part of the annual "Statistical Package" that is provided to the ECOFIN Council.

The second level consists of domain-specific quality reports produced by Eurostat and the ECB summarising the main findings for the euro area or the EU Member States. These reports assess the underlying compilation processes and their robustness, describe the legal basis and evaluate whether the statistics are in line with international statistical standards. They reflect comprehensive expert assessments on whether the statistics are fit for each of the broader purposes for which they are intended, including their comparability across Member States. These quality assessments are based on, among other sources, the input coming from national, domain-specific quality reports.

On the third level, depending on the domain, national quality reports (self-assessments) are produced by the institution compiling the national statistics. Most of these reports are voluntarily published by Members States on the CMFB’s website.[[4]](#footnote-5)

By focusing the quality assurance on the underlying macroeconomic and financial statistics that are used for many purposes rather than only the MIP indicators, statisticians mitigate the risk of excessive focus on the individual indicators, and examine quality issues from a system-wide perspective.

**4. The Memorandum of Understanding on MIP-related statistics**

At the beginning of November 2016, Eurostat and the ECB/DG-S signed a Memorandum of Understanding (MoU) covering the quality assurance of MIP-related statistics[[5]](#footnote-6). The MoU was signed after the two parties jointly recognised the quality frameworks of both the ESCB and the ESS.

The MoU covers Balance of Payments, International investment position, and financial accounts statistics. These are statistical domains where the ESS and ESCB assume a joint responsibility for production, and where the ESS and ESCB have more than 20 years of experience in closely cooperating. The statistical needs for the MIP have given a new dimension to this cooperation.

The MoU lays down the practical working arrangements for cooperation between Eurostat and the ECB/DG-S when these statistics are compiled by NCBs in their capacity as members of the ESCB. The MoU stipulates that the datasets are quality assured by the ECB/DG-S according to the ESCB's Public Commitment on European statistics.

Under the MoU, the ECB/DG-S provides Eurostat with quality assured data sets from the national central banks on an annual basis. The data sets come with additional information detailing major events and revisions that have impacted the data. These deliveries follow an agreed timetable, which takes the European Semester requirements into account. The first transmission of Balance of Payment/International investment position data and financial accounts statistics took place successfully in September/October 2017.

While the respective quality assessment frameworks have been mutually recognised in the context of the MoU and are consistent in terms of concepts and principles, ECB/DG-S and Eurostat, with the support of the CMFB, worked with the objective of harmonising the quality reporting on BoP/IIP and financial accounts statistics.

In 2017 an agreement was reached on the structure of these reports and on the set of quality indicators used. The full implementation of the alignment of the reports will be made in the course of 2018 (on reference data for 2017). While due to the different data coverage and legislation it is currently not possible to have one common report, its structure, the indicators and the findings included in the Eurostat and the ECB reports are to the maximum extent harmonised. Furthermore, a special section (box) focusing on the quality assessment of the BoP/IIP data used for MIP purposes has been introduced.

To further increase statistical quality over time, it was agreed that Eurostat and the ECB/DG-S, together with the national central banks and national statistical offices, may analyse the output quality and consistency of the datasets with related statistical domains. The MoU also foresees visits by the ECB/DG-S and Eurostat to national central banks or statistical offices to help assess the output quality of the MIP-relevant data and to better understand national production sources and methods. First visits, on pilot basis, took place in the last quarter of 2017; visit procedure guidelines have been elaborated based on the experience from these visits and confirmed by the CMFB.

**5. Concluding remarks**

The use of official statistics for MIP purposes, particularly in the context of an analytical framework that includes numerical thresholds, has further concentrated attention of users on the quality of the underlying statistics.

Statisticians have built an MIP quality system which is rooted in the existing quality systems for the relevant statistics. There has been no invention of a separate, parallel process for MIP to mitigate duplication and possible "mixed messages". The three level approach provides a bottom-up framework for drawing on countries' own assessments of quality, then adding a cross-country quality analysis from Eurostat and the ECB, and finally summarising the main conclusions for senior policy makers.

At the same time, users are not interested in the institutional compilation split between NSIs and NCBs for the production of the relevant statistics. They want clear and consistent information on quality aspects. The cooperation between the ESS and ESCB, including through the MoU described above, is intended to ensure this, notwithstanding the division of responsibilities at national level.

1. For further background please see the paper by Alessandro Turrini (DG ECFIN). [↑](#footnote-ref-2)
2. A relatively minor quality problem in one of the components would eventually have a sizable impact on the net concept. [↑](#footnote-ref-3)
3. The latest report is available at: http://ec.europa.eu/eurostat/documents/16624/8465494/2017\_ESS-ESCB\_quality\_assessment\_report.pdf [↑](#footnote-ref-4)
4. See http://www.cmfb.org/publications/mip-documents [↑](#footnote-ref-5)
5. The MoU is available at: https://www.ecb.europa.eu/ecb/legal/pdf/en\_mou\_between\_the\_ecb\_and\_eurostat\_november2016\_f\_sign.pdf [↑](#footnote-ref-6)